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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/174,957	12/28/1993	SHIRO KAMIYAMA	024703006	9165

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BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

LEADER, WILLIAM T

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 06/03/2003

29

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/174,957

Applicant(s)

KAMIYAMA ET AL.

Examiner

William T. Leader

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6 and 16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 7-15 is/are allowed.
- 6) ☒ Claim(s) 2,5,17,29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Receipt of the amendment filed on March 17, 2003, is acknowledged. New claims 29 and 30 have been added. Claims 1-17, 29 and 30 are pending. Claims 3, 4, 6 and 16 remain withdrawn from consideration. Claims 1 and 7-15 are allowed. Claims 2, 5, 17, 29 and 30 are under consideration.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 2, 5, 17, 29 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

5. Applicant has amended independent claims 2 and 17 to change the step of heating to a step of processing, and to recite that this step of processing forms the alloy into a processed article having a final shape. At page 3 of the Remarks,

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applicant states that support for these amendment can be found in the instant specification at least at page 1, lines 9-13, page 6, lines 13-15; taken in connection with page 15, lines 17-20. However, a careful review of the specification does not reveal that the portions referred to by applicant disclose that processing at a high temperature of 200°C or above forms the alloy into a processed article having a final shape. Page 1, lines 5-13 read as follows:

This invention relates to a surface treatment method for treating the surface of an aluminum alloy containing, e.g., 2.0% (by weight; the same applies hereinafter) or more of Mg and having been processed at a high temperature, to thereby obtain surface-treated aluminum alloy high-temperature processed articles as exemplified by construction materials, transport machinery materials, ornamentals, vessels and so forth having a good anticorrosion, a good adhesion of coatings and a beautiful surface appearance.

There is no mention of a final shape in this passage. Page 6, lines 13-15 read as “The high-temperature processing at 200°C or above herein refers to superplastic processing and hot processing.” while page 15, lines 17-20 read as “Superplastic materials (sheet thickness: 1.6 mm) comprised of Al-4%Mg-1%-0.005%B were maintained at 500°C for 10 minutes, and thereafter processed by plastic blow molding at 5 MPa in the atmosphere.” Neither of these passages refers to a final shape.

Claim Rejections - 35 USC § 103

6. Claims 2, 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sopp, Jr. (3,655,467) combined with McAuliffe et al (5,104,465) for the reasons given in the previous office action and in view of the following comments.

7. Applicant's Remarks have been carefully considered but are not deemed to be persuasive. At page 5 of the Remarks, applicant argues that neither Sopp, Jr. nor McAuliffe discloses or suggests processing an aluminum alloy into a processed article having a final shape. Applicant states that sheet stock cannot be considered the same as or suggestive of an article having a final shape. This argument is not convincing. Sheet material has uses in and off itself, such a roofing material. Moreover, example 1, at page 15, lines 17-19 of the specification (one of the portions of the specification relied on by applicant to support the processing of a product into a final shape) relates to processing *sheet material* with a thickness of 1.6mm. See the quotation above. Page 15, lines 20-24 continue "The *resulting high-temperature processed sheets* were left to naturally cool, and then each etched using an aqueous solution containing a chelating agent and under conditions as shown in Table 1, followed by washing with water and then drying" (emphasis added). Thus, the specification refers to the configuration of material after processing at the high temperature as a sheet. Applicant's claimed process is not considered to differ from the teaching of the references based on the configuration of material.

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8. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sopp, Jr. (3,655,467) combined with McAuliffe et al (5,104,465) as applied to claims 2, 5 and 17 above, and further in view of the Lowenheim text *Electroplating* and *Hackh's Chemical Dictionary*.

9. Newly presented claims 29 and 30 recite that an oxide layer is formed on the surface of the article during the step of processing and that the oxide layer is decreased or removed by the step of etching. The Lowenheim text states that aluminum alloys form a natural, impervious oxide film. Hackh's Chemical Dictionary discloses that aluminum is readily oxidized. This film forms very rapidly. In view of these teachings, the aluminum articles of Sopp, Jr. and McAuliffe et al would have had an oxide film. In particular, McAuliffe et al disclose treatment of an Al-Mg alloy at high temperature, but do not suggest performing the operations in an oxygen-free atmosphere. Thus, oxygen in the atmosphere would have reacted with the aluminum to form an oxide film. In table I, Sopp, Jr. discloses the weight loss due to etching. Since the etchant contacts the surface of the aluminum alloy, and the surface has an oxide film, at least part of the oxide would have been removed.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johnstone discloses that panels of roll-formed sheet material such as aluminum panels are widely used for roofing. See column 1, lines 9-11.

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11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William T. Leader whose telephone number is 703-308-2530. The examiner can normally be reached on Mondays-Thursdays and alternate Fridays, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on 703-308-1146. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

WL
William Leader
May 30, 2003

Rsk
ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700